NOMENCLATURE AND TAXONOMY OF A NEMATINE SAWFLY OCCURRING IN BRITAIN (HYMENOPTERA: TENTHREDINIDAE)

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Alteration to British list of Symphyta: **Pristiphora sermola** nom. nov., = *variipes* (Lindqvist) preoccupied, = *lanifica* Liston, misidentification. **Lygaeophora** subgen. nov. is described and the name *Lygaeotus* (subgenus of *Pristiphora*) made available by the designation of *Nematus coactulus* Ruthe as the type species.

Introduction

The Nematinae is most rich in species in northern and alpine parts of the northern hemisphere. In Europe, they form an important part of the plant-feeding insect fauna in the Alps (Benson, 1955) and in the northern countries (Zhelochovtsev, 1988). Their species richness declines in Central Europe, very few species being known in the Mediterranean region (Benson, 1968). Worldwide, many Nematines are attached to Salicaceae (particularly *Salix* itself) and Betulaceae as larval hosts. Perhaps in some way this strong association, and the species richness of willows themselves in boreal regions, has played a role in creating a large number of new niches for these sawflies fairly recently in geological time. Unfortunately for the taxonomist, the resulting burst of adaptive radiation in the group has caused great difficulty in the separation of species, and even some genera.

The superficial similarity of many adult forms which can usefully be defined as biological species, using larval characters and behavioural differences (e.g. foodplant association), has increasingly led to a reliance on greater or lesser genitalic differences for identification. Doubt can often be cast on putative colour characters and some small differences in external morphology because of known variability. Particularly in the extreme climate of parts of arctic Europe, including the Scottish mountain tops, this variability has been shown to be considerable in some species (Benson, 1962: p. 384). For these reasons I have concentrated mainly on genitalic characters in this article. The morphological terms used are those first proposed by Ross (1945).

Pristiphora is one of the largest European sawfly genera, with approximately 110 validly described species, 48 of which are known in the British Isles. Because of its size, there are numerous unresolved taxonomic and nomenclatural problems to be dealt with. Studies of type material are unfortunately certain to lead to many name changes. Viitasaari & Vikberg (1985) have already dealt with some of these. Their list is recommended for use by British sawfly students as a supplement to Fitton *et al.* (1978). Some further taxonomic problems in *Pristiphora* are clarified here.

Identity of British *Pristiphora Lanifica* Auctt.

Liston (1981) introduced the name *Pristiphora lanifica* (Zaddach, in Brischke & Zaddach, 1882) to the British list. The first female British specimens were found ovipositing in the young leaves of *Salix caprea* L. in Edinburgh. Subsequently the larva was described (Liston, 1982) and a male specimen captured near Aberdeen (Liston, 1984). At the time of these captures I was greatly influenced by the paper of Hellén (1975) in which all of the species related to *lanifica* (Zadd.) were synonymized with that taxon. As Viitasaari & Vikberg (1985) have now pointed

out, much of the synonymy proposed by Hellén is inaccurate. In particularly, *P. lanifica* is not conspecific with *variipes* (Lindqvist, 1952) (see also Zhelochovtsev, 1988) Scottish specimens are in fact referable to the taxon described by *Lindqvist* as *variipes*.

Before discussing the British species further it is necessary to give it a new name: **Pristiphora sermola** nom. nov. for *Pristiphora variipes* (Lindqvist, 1952), preoccupied by *Pristiphora varipes* Le Peletier, 1823 (p. 61). The variant spellings of these species-group names (*variipes/varipes*) do not alter their status as homonyms: Article 58, International Code of Zoological Nomenclature (ICZN).

P. sermola (= *variipes* (Lqv.)) has a more obtuse tip to the paravalva of the penis-valve (Fig. 1) than *lanifica* (Fig. 2) and the valviceps of the former are altogether smaller. The female lancet has less pronounced serrulae in *sermola* (Fig. 3) than *lanifica* (Fig. 4). Further distinguishing characters are given by Lindqvist (1952). The larva of *lanifica* is attached to *Salix phylicifolia* L. (Kontuniemi, 1960: Zhelochovtsev, 1988), that of *sermola* feeds on *S. caprea*. Larvae of both species feed communally. They are members of a distinctive subgenus of *Pristiphora* containing approximately eight European species (Lindqvist, 1952).

LYGAEOPHORA SUBGEN. NOV.

Type species. *Lygaeonematus variipes* Lindqvist, 1952

Female. Sawsheath short, wide, subparallel-sided in dorsal view (Liston, 1981, Fig. 1) with dense brush of apical setae.

Male. Penis-valve with very short valvispina, and a short basal flap often developed below this. Dorsal surface of pseudoceps setose, tip elongated in a thin spur which is normally upcurved (Figs 1 and 2).

Larva. Free-feeding on leaf blade, communally or singly (Vikberg, 1966), on *Salix*.

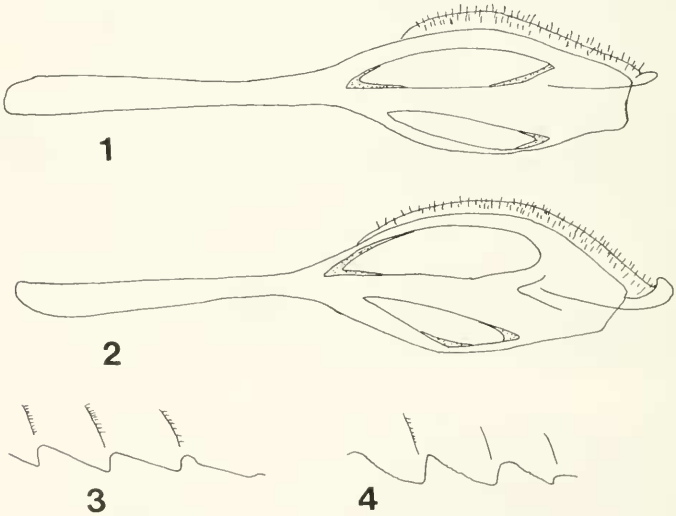

Fig. 1. *Pristiphora sermola*, penis-valve.
Fig. 2. *P. lanifica*, penis-valve.
Fig. 3. *P. sermola*, basal serrulae of lancet.
Fig. 4. *P. lanifica*, basal serrulae of lancet.

Comments

The name *Lygaeophora* was first proposed as a subgenus by Lindqvist (1952), but is not available under this authorship following the ICZN because no type species was designated (Abe & Smith, 1991). Viitasaari & Vikberg (1985) used the name attributing authorship to Hellén (1975). However, Hellén did not make the name available: in fact he did not recognize any subgenera of *Pristiphora* or even the validity of the genera *Sharliphora* Wong or *Stauronematus* Benson. Separation of *Pristiphora* into subgenera is increasingly desirable as the number of known species rises. A similarly useful division is the subgenus *Lygaeotus* described by Lindqvist (1952) (= group C of *Pristiphora*: Benson, 1958). As for *Lygaeophora*, *Lygaeotus* requires the designation of a type species to make the name available: I hereby designate *Nematus coactulus* Ruthe, 1859 as the type species of *Lygaeotus*.

Zhelochovtsev (1988) included the *Lygaeophora* species in the genus *Micronematus* Konow, but I have little doubt that *Micronematus* (type species: *Nematus pullus* Förster, a junior synonym of *monogyniae* (Hartig)) should be reserved at the moment for *M. monogyniae* (Htg.). The distinctive biology of this species, a gall-maker in rolled leaf edges of *Prunus spinosa* L., and its different larval morphology justify this treatment as proposed by Lorenz & Kraus (1957).

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BOOK REVIEW

The butterflies and moths of Hampshire and the Isle of Wight: additions and corrections by B. Goater. U.K. Nature Conservation No. 7: Joint Nature Conservation Committee, Peterborough, 1992, ISBN 1-873701-26-8, vi + 266 pages, £10.70.—When the *Butterflies and moths of Hampshire and the Isle of Wight* was published in 1974 one reviewer stated that it would undoubtedly serve as the standard reference work for those counties. This has certainly been the case and workers in the Lepidoptera of Hampshire have constantly consulted it. After nearly 20 years however the need for an update was becoming pressing and perhaps few local lists have been more eagerly awaited. Mr Goater acknowledges these needs in his foreword in which he also dedicates the work to the memory of the late Denzil Ffennell.

The same format is used in the supplement as in the original, although nomenclature has been brought up to date and the species are numbered. The volume is presented in A4 format and although it may have been pleasing to have the two volumes shoulder to shoulder on one's bookshelves the reviewer finds the text particularly clear and easy to read. The descriptive presentation adopted by Mr Goater, rather than the numeric abbreviations used in some other lists, is clear and concise and the reviewer also appreciates records being attributed. As an example one entry under *M. aureatella* (Scop.) states "Woosons Hill, 7.v.88, sev. flying over *Vaccinium* in sunshine (JRL, DHS)" which seems to be an eminently useful and concise presentation of information.

Each species is referenced by page to the earlier volume where an entry appeared even when there are no additional records; however, including so much up-to-date information as it does, this supplement stands very well on its own without its predecessor.

One of the fascinating aspects of the records quoted here is the way in which the rise or decline of species becomes clear; as an example of which the entries for *Eulithis prunata* (L.) may be quoted. In 1974 Mr Goater concluded this was a very uncommon species which had probably decreased, although it was recorded from all three vice-counties usually as single specimens. In 1992 he is able to state that this species has certainly increased in Hampshire and the Isle of Wight since 1974, and to quote an impressive range of records in support of this contention. What changes will the next 15 years bring?

The only error that the reviewer has spotted is that the *Lampides boeticus* (L.) taken by the late E. H. Wild in Highcliffe did not come to actinic light but was secured in a tube during the day!

Following the systematic section the work is completed by an appendix listing additional localities and grid numbers under the three vice-counties covered and the indices of both the scientific and English names.

There is no doubt that this work is essential to anyone interested in the Lepidoptera of Hampshire and the Isle of Wight but because it records the changing status of many species over a limited period it will be of much wider interest and of particular use to those involved in conservation. The original volume in 1974 set a standard by which county lists are still measured and this work carries on that tradition, it is also very good value for money and is thoroughly recommended.

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